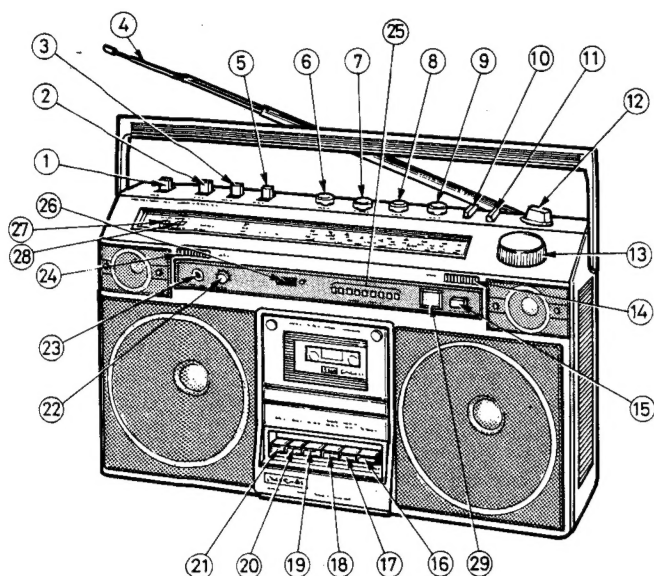


SERVICE MANUAL

No. 1427

898

KEY TO ILLUSTRATIONS



- | | |
|-------------------------------|--------------------------------------|
| ① FUNCTION SELECTOR | ①⑦ FAST FORWARD/CUE BUTTON |
| ② REC. MUTE SWITCH | ①⑧ REWIND/REVIEW BUTTON |
| ③ TAPE SELECTOR SWITCH | ①⑨ PLAYBACK BUTTON |
| ④ TELESCOPIC ANTENNA (AERIAL) | ②① RECORD BUTTON |
| ⑤ MODE SWITCH | ②② STOP/EJECT BUTTON |
| ⑥ BALANCE CONTROL | ②③ MIXING VOLUME CONTROL |
| ⑦ BASS CONTROL | ②④ MIXING MIC SOCKET |
| ⑧ TREBLE CONTROL | ②⑤ BUILT-IN MICROPHONE (LEFT) |
| ⑨ VOLUME CONTROL | ②⑥ BATTERY/OPERATION/LEVEL INDICATOR |
| ⑩ LOUDNESS SWITCH | ②⑦ TAPE COUNTER |
| ⑪ AFC SWITCH | ②⑧ STEREO INDICATOR |
| ⑫ BAND SELECTOR | ②⑨ TUNING INDICATOR |
| ⑬ TUNING CONTROL | ②⑩ PROGRAM INDICATOR |
| ⑭ BUILT-IN MICROPHONE (RIGHT) | |
| ⑮ PROGRAM SWITCH | |
| ⑯ PAUSE BUTTON | |

SPECIFICATIONS

GENERAL SECTION

Semi-conductors: IC's: 9
Transistors: 24
Diodes: 17
LED: 9

Power (Mains) Supply: AC: 220V 50 Hz [For E]
240V 50 Hz [For E(BS)]
DC: 12V (IEC R20 x 8)

Power (Mains) Consumption: 24W

Dimensions: 294(H) x 504(B) x 167(D)

Weight: 6.4 kg (with batteries)

Power output: 5W/CH (T.H.D. 10%), 6W/CH (MAX)

Speaker: 5 cm 4 ohms x 2,
16 cm 2.8 ohms x 2

TUNER SECTION

Circuit System: FM/SW/MW/LW 4-band superheterodyne

Tuning Range: FM: 87.5 to 108 MHz
SW: 6 to 18 MHz
MW: 530 to 1605 kHz
LW: 150 to 350 kHz

Sensitivity: FM: 10 dB (pra.) 2 dB (max.)
SW: 25 dB (pra.) 20 dB (max.)
MW: 45 dB (pra.) 35 dB (max.)
LW: 52 dB (pra.) 40 dB (max.)

Intermediate Frequency: FM: 10.7 MHz
SW/MW/LW: 468 kHz

Antennas (Aerials): FM/SW: Telescopic antenna or

TAPE RECORDER

Tape: External antenna
MW/LW: Ferrite-core antenna

Tape Speed: Cassette tape (C-30, 60, 90)
4.75 cm/s

Recording System and Bias Frequency: AC bias, 57 kHz

Erasing System: AC erasing

Track System: 4 track, 2 channel

Frequency Response: Normal: 70~10,000 Hz
CrO₂: 70~13,000 Hz
Metal: 70~15,000 Hz

S/N (Signal to Noise Ratio): 45 dB

WoW and Flutter: 0.1% (WRMS)

Cross Talk: 60 dB

Erase Ratio: 65 dB

Input Sensitivity and Impedance: Microphone: 5 mV 10 kohms
Phono: 3 mV, 50 kohms
Record/playback (DIN): 0.5 mV/kΩ
40 kohms

Output Level and Impedance: Record/playback (DIN): 600 mV
5 kohms
Ext. speaker: 2.8 ohms
Headphone: 56 ohms

Fast Forward or Rewinding Time: 120 sec. (Using C-60)

Distortion: 2%

Motor: DC micromotor

CASSETTE TAPE RECORDER WITH FM/SW/MW/LW RADIO

SAFETY PRECAUTION

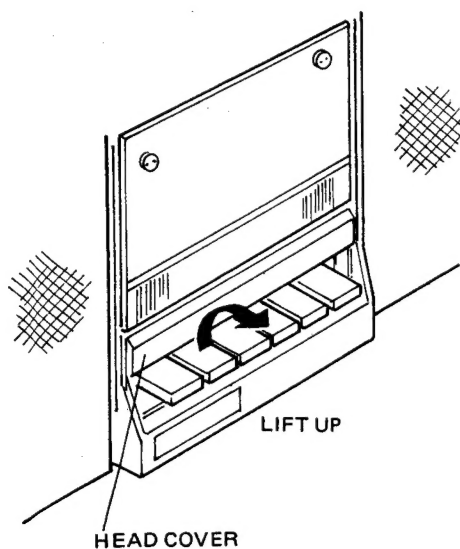
The following precautions should be observed when servicing.

1. Since many parts in the unit have special safety-related characteristics, always use genuine Hitachi's replacement parts. Especially critical parts in the power circuit block should not be replaced with other makes. Critical parts are marked with \triangle in the schematic diagram, and circuit board diagram.
2. Before returning a repaired unit to the customer, the service technician must thoroughly test the unit to ascertain that it is completely safe to operate without danger of electrical shock.

DISASSEMBLY

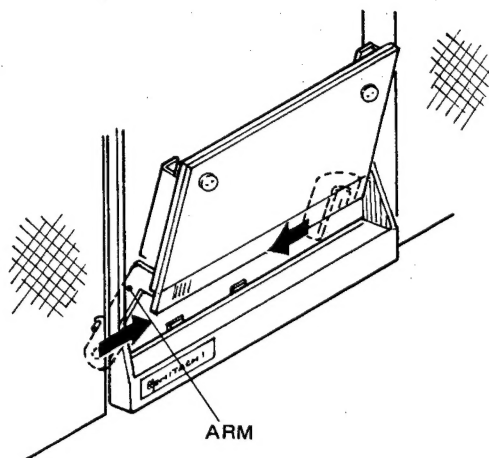
1. Head Cover

Lift up and pull the head cover in the direction of arrow.



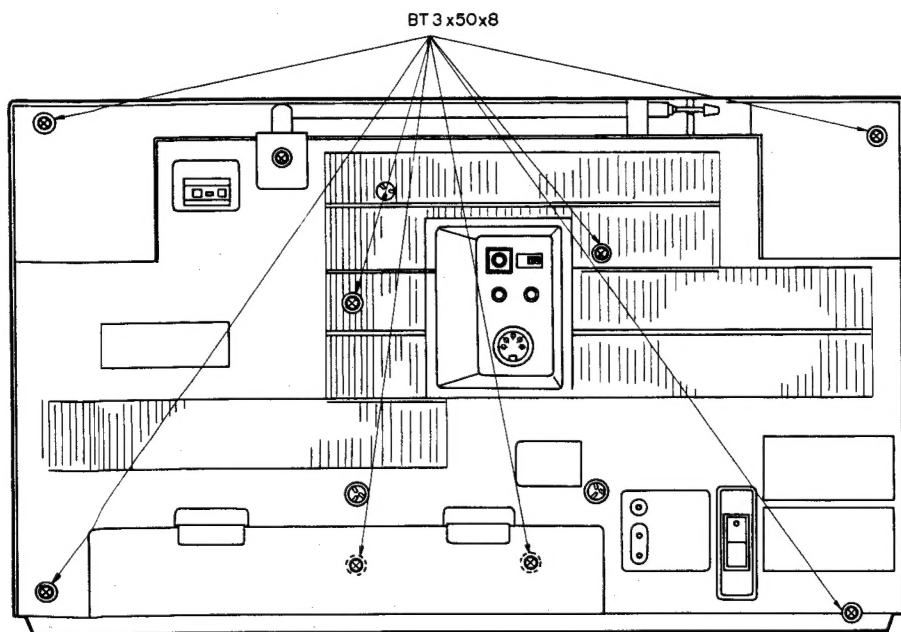
2. Cassette Lid

Press the eject button to release the engagement of the mechanism and cassette lid. Then push the both arms of cassette lid in the direction of arrow.

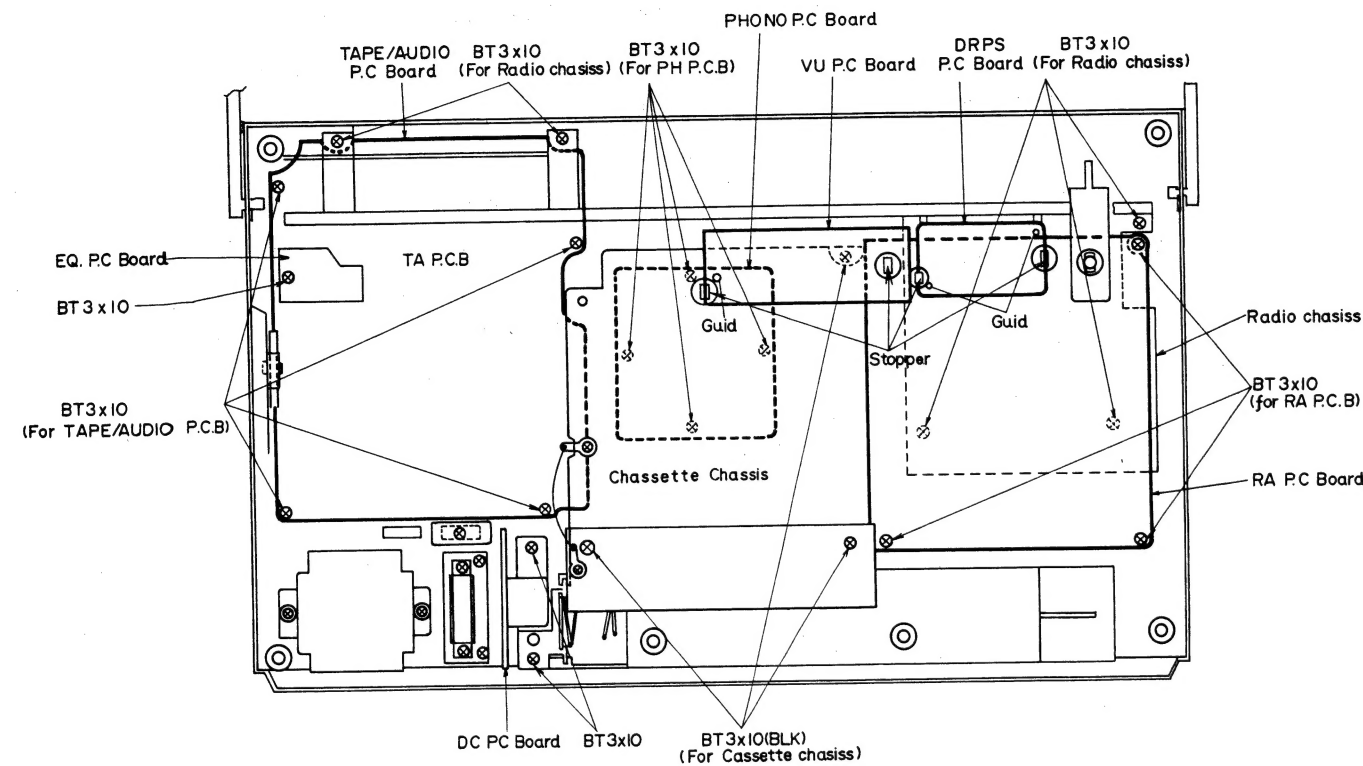


3. Rear Cover

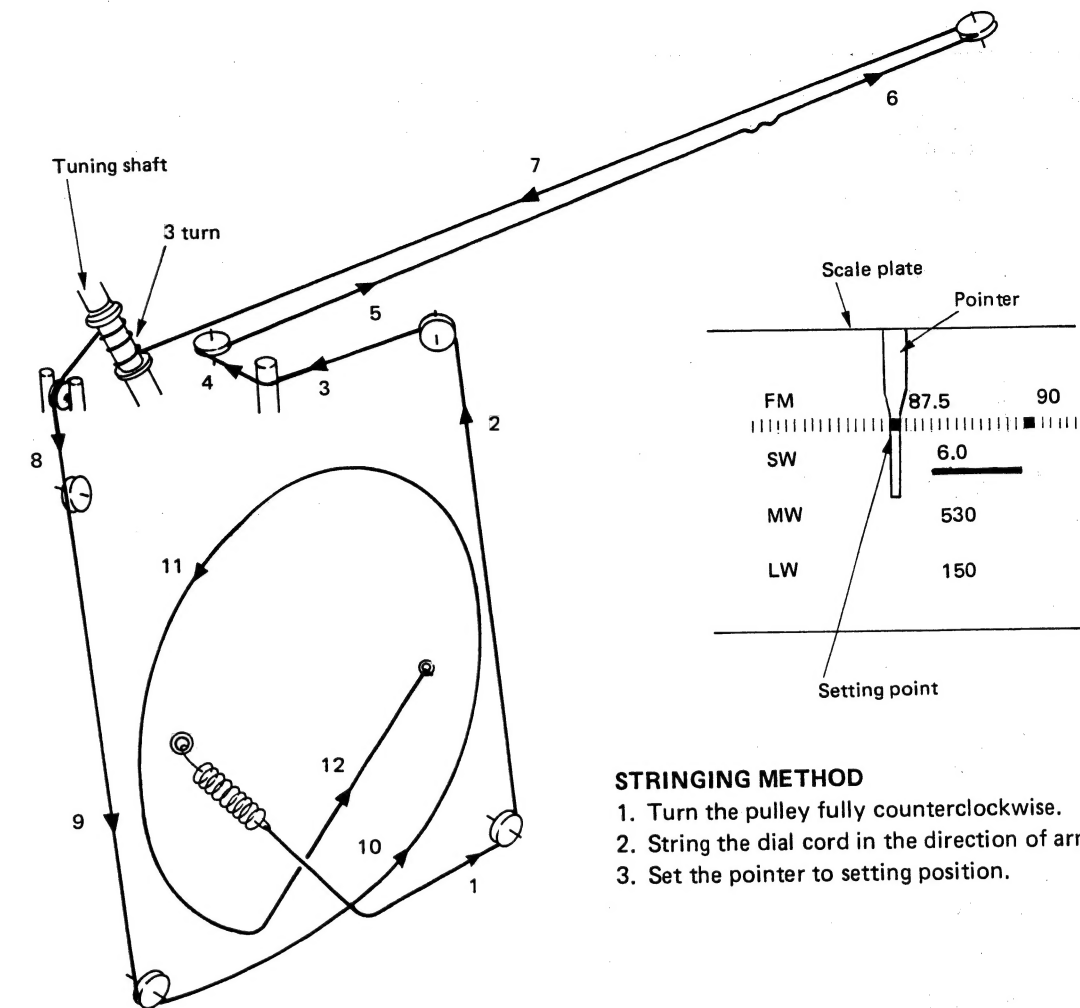
Remove tuning knob. Press the eject button to release the engagement of the mechanism and cassette lid.



4. Cassette Chassis and PC Board (TA, RA, VU, DRPS, PH, EQ)



DIAL CORD STRINGING

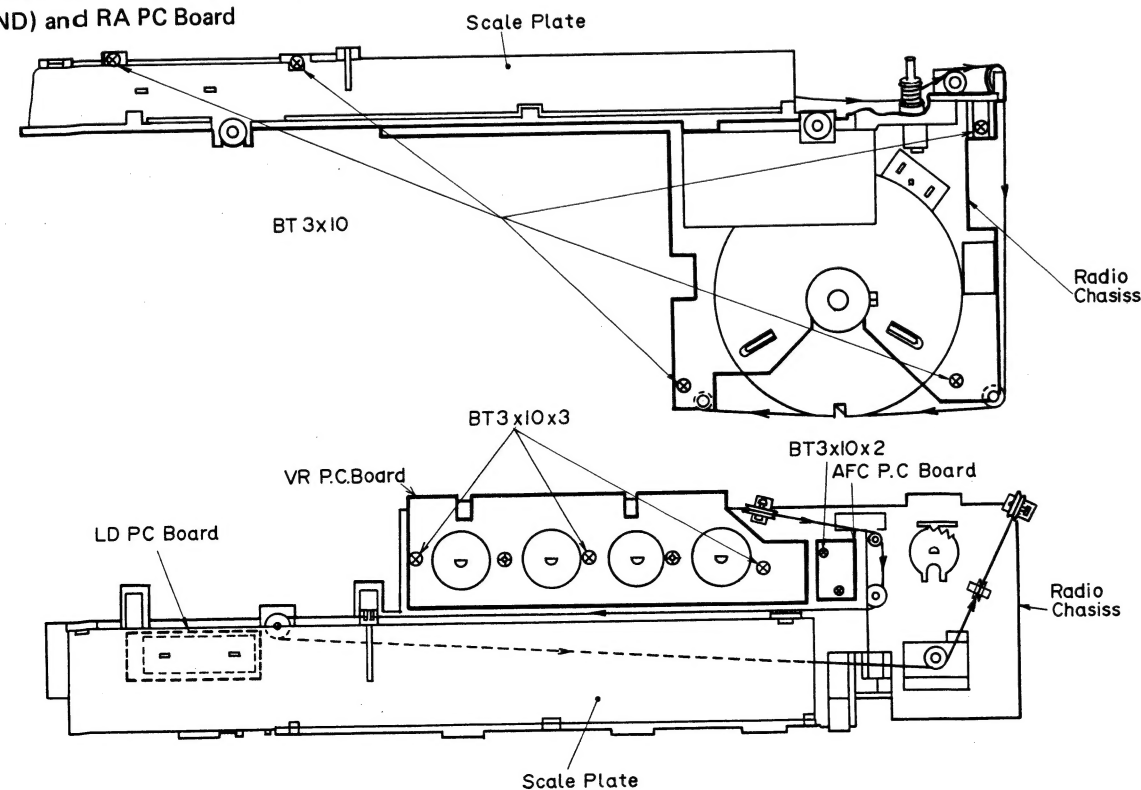


STRINGING METHOD

1. Turn the pulley fully counterclockwise.
2. String the dial cord in the direction of arrow (No.1~12).
3. Set the pointer to setting position.

5. Radio Chassis and VR, LD, AFC, PC Board

Remove knobs (VOL, BASS, TREBLE, BALANCE, BAND) and RA PC Board



LUBRICATION

Lubricate one or two drops of oil to rotating point or lubricate grease to sliding point. Lubricate the respective parts listed below once every 1000 hours or once a year under normal conditions of use. Avoid oiling them excessively, or rotation may become irregular because of oil splashes.

Lubrication		Oil or Grease
Spring resonance prevention		Froil (GB-TS-1)
Rotary section	Metal and metal	Pan motor oil (10W-40)
	Mold and metal	Sonic slider oil (#1600)
Sliding section	Metal and metal	Hitasol (MO-138)
	Mold and mold Mold and metal	White grease (FL-LUBE-A)

INSPECTION

Mode	Item	Pressure or Torque
Playback	Pressure of pressure roller	350 ~ 500 gr
	Take-up torque	35 ~ 50 gr-cm
	Supply reel back tension	3.0 ~ 5 gr-cm
Rewind	Rewind torque	85 ~ 120 gr-cm
Fast forward	Fast forward torque	85 ~ 120 gr-cm

ADJUSTMENT

1. Tuner Section

* For West Germany

Step	Adjustment Item	Measuring Instrument and Connection			Genescope or Signal Generator Frequency	Dial Pointer Position	Adjust	Reading
		Measuring Instrument	Input Terminal	Output Terminal				
1	(1) FM IF	Turn T202 fully counterclockwise.						
	(2) S-Curve	• Genescope (10.7 MHz)	TP101	TP201	10.7 MHz	Highest	T101 T201	Note 1
							T202	Note 2
2	(1) FM OSC. (Covering)	• FM signal generator (400 Hz 30% mod.) • Oscilloscope • VTVM	Ext. antenna terminal (thru dummy antenna) * Note 6	Speaker terminal	87 MHz (87.5 MHz*)	Lowest	L103	Max.
	(2)				109 MHz (108 MHz*)	Highest	CT102	
	(3)				Repeat steps (1) and (2)			
3	(1) FM ANT. (Tracking)				90 MHz	90 MHz	L101	Max.
	(2)				106 MHz	106 MHz	CT101	
	(3)				Repeat steps (1) and (2)			
4	(1) FM MPX (Multiplex)	• Frequency counter	Connect a 10 μ F 25V electrolytic capacitor between the No. 2 pin of IC301 and ground.	TP303	—	—	RT302	19 kHz \pm 200 Hz (Note 3)
5	(1) FM Stereo Separation	• FM signal generator [98 MHz, 60 dB L+R (1 kHz): 180 mV 30% mod. Pilot (19 kHz) : 20 mV 10% mod.] • Oscilloscope • VTVM	Ext. antenna terminal (thru dummy antenna) * Note 6	TP301 TP302	98 MHz 60 dB	98 MHz	RT301	Note 4
6	(1) AM IF	• Genescope (468 kHz)	Ferrite antenna	TP251	468 kHz	Highest	T151 T201	Note 5
	(2)				Repeat step (1)			
7	(1) MW OSC. (Covering)	• AM signal generator (400 Hz, 30% mod.) • VTVM	Ferrite antenna (thru dummy) * Note 7	TP251	515 kHz	Lowest	L155	Max.
	(2)				1650 kHz	Highest	CT155	
	(3)				Repeat steps (1) and (2)			
8	(1) MW ANT. (Tracking)				600 kHz	600 kHz	L152	Max.
	(2)				1400 kHz	1400 kHz	CT152	
	(3)				Repeat steps (1) and (2)			
9	(1) LW OSC. (Covering)				145 kHz	Lowest	L156	Max.
	(2)				360 kHz	Highest	CT156	
	(3)				Repeat steps (1) and (2)			
10	(1) LW ANT. (Tracking)				160 kHz	160 kHz	L153	Max.
	(2)	330 kHz	330 kHz	CT153				
		Repeat steps (1) and (2)						

Step		Adjustment Item	Measuring Instrument and Connection			Genescope or Signal Generator Frequency	Dial Pointer Position	Adjust	Reading
			Measuring Instrument	Input Terminal	Output Terminal				
11	(1)	SW OSC. (Covering)	• AM signal generator (400 Hz, 30% mod.)	Ext. antenna terminal (thru dummy antenna) * Note 8	TP251	5.8 MHz	Lowest	L154	Max.
	(2)					18.5 MHz	Highest	CT154	
	(3)					Repeat steps (1) and (2)			
12	(1)	SW ANT. (Tracking)				• VTVM			6.5 MHz
	(2)		16.0 MHz	16.0 MHz	CT151				
	(3)		Repeat steps (1) and (2)						
13	(1)	FM Tuning level	• Genescope (10.7 MHz)	TP102	TP252				10.7 MHz

Note:

- Feed in a weak signal to TP102 from the genescope. Adjust T101, T201 for maximum gain and the wave form indicated in Figure 1. If the center of the wave form cannot be lined up on the marker, adjust the right/left balance.
- Use the T202 core to form the S-curve shown in Figure 2. Adjust the symmetry of A and B about point C for linearity.
- Connect the frequency counter to TP301, via a resistor of 100 k Ω .
- a. After feeding in of R channel and pilot signals, adjust RT301 for a minimum L channel output.
b. Optimize RT301 so that the leak level of the L channel signal is equal to that of the R channel signal.

- Feed in a weak signal from the genescope. Adjust T151 and T201 for maximum gain and the waveform of Figure 3.
- Transmit to the dummy antenna in Figure 4 and connect to P1.
- Connect AM signal generator to loop antenna, bring near to ferrite antenna.
- Transmit to the dummy antenna in Figure 5 and connect to P1.

Adjust the genescope output so that there is a little noise riding on the leading edge.

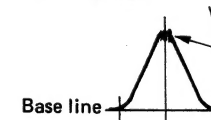


Fig. 1

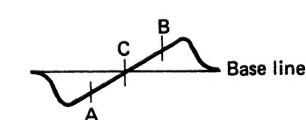
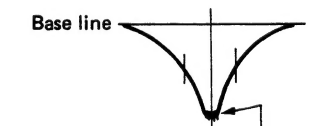
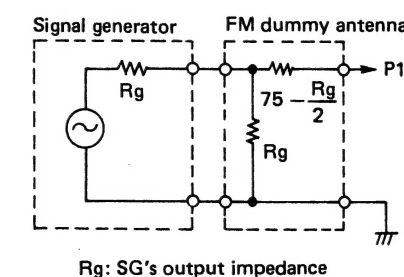


Fig. 2



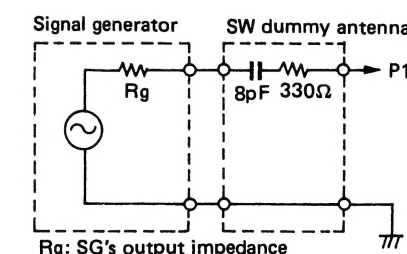
Adjust the genescope output so that there is a little noise riding on the leading edge.

Fig. 3



Rg: SG's output impedance

Fig. 4



Rg: SG's output impedance

Fig. 5

REPLACEMENT PARTS LIST

2. Tape Recorder Section

Perform the following adjustments in the sequence stated after cleaning the head, pressure roller, and capstan with a head cleaning stick moistened in alcohol.

Step	Adjustment Item	Measuring Instrument and connection			Check Tape	Mode	Adjusted Position	Adjusted Value	Remarks
		Measuring Instrument	Input Terminal	Output Terminal					
1	Head azimuth	• VTVM	—	DIN OUT	MTT316 or MTT216 12.5 kHz	Playback	Azimuth adjusting screw	Output Max.	Note 1
2	Bias current	Set the tape selector switch to normal position.							
		• VTVM	—	Record/playback head terminal of each channels	—	Record	RT461R/L	12V	Note 2
3	DRPS operation level	—	—	—	DRPS-1 (TMT-6261 500Hz, -40dB -35dB)	Playback	RT403	—	Note 3

Note 1. When the maximum values of both channels are different, tune to the maximum value of the L channel. In this case, the difference between the maximum values of both channels should be within 2 dB.

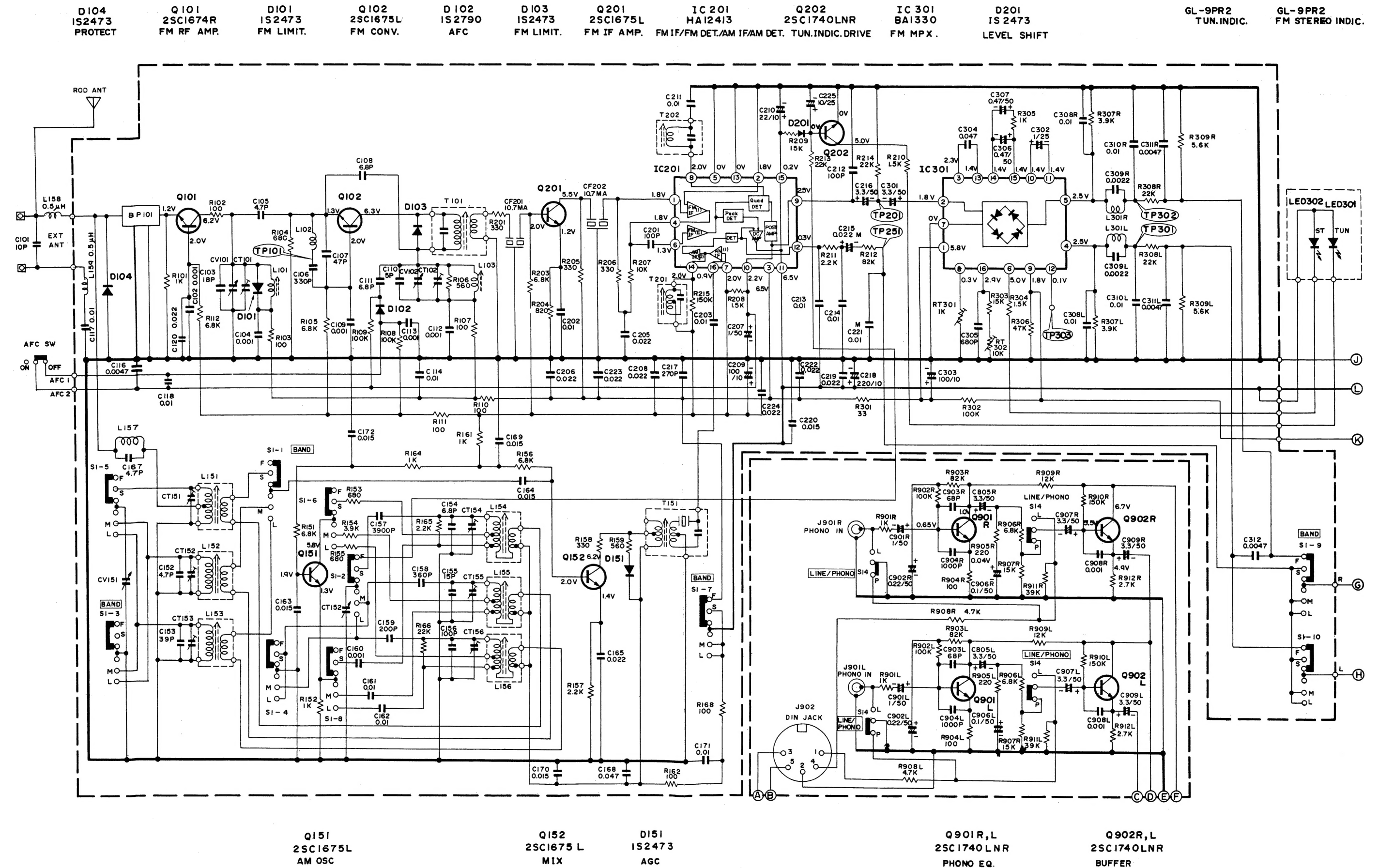
2. Set the record mode. Adjust RT461L,R so that the bias voltage of 12V is applied to the both terminals of Record/playback head.

3. Adjusting D.R.P.S.

Play the test tape (DRPS-1), set the program indicator to 3 in the PLAY mode, press the FF button and set the unit to the tune selecting mode. Adjust RT403 by playing the level-control section (-40dB, 500Hz) and set the program indicator to "2". Leave it as it is, and check that the program indicator changes by 1 blank (no indication) in sequence.

SYMBOL-NO	P-NO	DESCRIPTION	SYMBOL-NO	P-NO	DESCRIPTION
CAPACITORS			C202	0209026	CERAMIC DISC (RESISTOR SHAPE) 0.01M F+-30
CT101	5052501	PLASTIC FILM VARIABLE CAPACITOR	C203	0209026	CERAMIC DISC (RESISTOR SHAPE) 0.01M F+-30
CT102	5052501	PLASTIC FILM VARIABLE CAPACITOR	C211	0209026	CERAMIC DISC (RESISTOR SHAPE) 0.01M F+-30
CT151	5058191	TRIMMER 10PF	C212	0208141	CERAMIC DISC (RESISTOR SHAPE) 100PF +-5%
CT152	5052501	PLASTIC FILM VARIABLE CAPACITOR	C220	0209027	CERAMIC DISC (RESISTOR SHAPE) 0.015 MF+-3
CT153	5058191	TRIMMER 10PF	C308LR	0209026	CERAMIC DISC (RESISTOR SHAPE) 0.01M F+-30
CT154	5058191	TRIMMER 10PF	C309LR	0209022	CERAMIC DISC (RESISTOR SHAPE) 0.002 2MF+-
CT155	5052501	PLASTIC FILM VARIABLE CAPACITOR	C310LR	0209026	CERAMIC DISC (RESISTOR SHAPE) 0.01M F+-30
CT156	5058102	VARIABLE CAPACITOR	C311LR	0209026	CERAMIC DISC (RESISTOR SHAPE) 0.01M F+-30
CV101	5052501	PLASTIC FILM VARIABLE CAPACITOR	C405LR	0209009	CERAMIC DISC (RESISTOR SHAPE) 820PF +-10%
CV102	5052501	PLASTIC FILM VARIABLE CAPACITOR	C411LR	0209021	CERAMIC DISC (RESISTOR SHAPE) 1500PF +-10%
CV151	5052501	PLASTIC FILM VARIABLE CAPACITOR	C414LR	0209022	CERAMIC DISC (RESISTOR SHAPE) 0.002 2MF+-
CV152	5052501	PLASTIC FILM VARIABLE CAPACITOR	C418LR	0209022	CERAMIC DISC (RESISTOR SHAPE) 0.002 2MF+-
C102	0209010	CERAMIC DISC (RESISTOR SHAPE) 1000P F+-10	C428	0209026	CERAMIC DISC (RESISTOR SHAPE) 0.01M F+-30
C104	0209010	CERAMIC DISC (RESISTOR SHAPE) 1000P F+-10	C429LR	0209010	CERAMIC DISC (RESISTOR SHAPE) 1000P F+-10
C105	0208155	CERAMIC (RESISTOR SHAPE) 4.7PF+-10%	C452LR	0209025	CERAMIC DISC (RESISTOR SHAPE) 6800P F+-30
C106	0209004	CERAMIC DISC (RESISTOR SHAPE) 330PF +-10%	C502	0209026	CERAMIC DISC (RESISTOR SHAPE) 0.01M F+-30
C107	0208137	CERAMIC (RESISTOR SHAPE) 47PF+-5%	C704	0256362	TANTALUM ELECTROLYTIC 0.22MF+-10% 3 5V
C108	0208156	CERAMIC (RESISTOR SHAPE) 8.2PF+-10%	RESISTORS		
C109	0209010	CERAMIC DISC (RESISTOR SHAPE) 1000P F+-10	RC601	0186451	CR PACK
C111	0208157	CERAMIC (RESISTOR SHAPE) 6.8PF+-10% (NP-0)	RC602	0186451	CR PACK
C112	0209010	CERAMIC DISC (RESISTOR SHAPE) 1000P F+-10	RT301	0151806	SEMI VARIABLE RESISTOR 1KOHM B
C113	0209010	CERAMIC DISC (RESISTOR SHAPE) 1000P F+-10	RT302	0151808	SEMI VARIABLE RESISTOR 10K OHM RS88
C116	0209024	CERAMIC DISC (RESISTOR SHAPE) 4700P F+-30	RT403	0151808	SEMI VARIABLE RESISTOR 10K OHM RS88
C152	0208159	CERAMIC (RESISTOR SHAPE) 10PF+-10%	RT461LR	0151818	VARIABLE RESISTOR 100KOHM
C153	0208166	CERAMIC (RESISTOR SHAPE) 39PF+-10%	RV401LR	5000781	VARIABLE RESISTOR 100KOHM(B)
C154	0208158	CERAMIC (RESISTOR SHAPE) 8.2PF+-10%	RV402LR	5000782	VARIABLE RESISTOR 100KOHM(C)
C155	0208162	CERAMIC (RESISTOR SHAPE) 18PF+-10%	RV403LR	5000821	VARIABLE RESISTOR 10KOHM(B)
C156	0208141	CERAMIC DISC (RESISTOR SHAPE) 100PF +-5%	RV404	5000771	VARIABLE RESISTOR 50KOHM(B)
C160	0209010	CERAMIC DISC (RESISTOR SHAPE) 1000P F+-10	RV405	5000401	VARIABLE 10KOHM(A)
C161	0209026	CERAMIC DISC (RESISTOR SHAPE) 0.01M F+-30	SEMI-CONDUCTORS		
C162	0209026	CERAMIC DISC (RESISTOR SHAPE) 0.01M F+-30	D101	5330573	DIODE 1S2473
C163	0209027	CERAMIC DISC (RESISTOR SHAPE) 0.015 MF+-3	D102	5330661	DIODE SILICON LS2790 200MHZ 80MW
C164	0209027	CERAMIC DISC (RESISTOR SHAPE) 0.015 MF+-3	D103	5330573	DIODE 1S2473
C167	0208155	CERAMIC (RESISTOR SHAPE) 4.7PF+-10%	D104	5330573	DIODE 1S2473
C169	0209027	CERAMIC DISC (RESISTOR SHAPE) 0.015 MF+-3	D151	5330573	DIODE 1S2473
C171	0209026	CERAMIC DISC (RESISTOR SHAPE) 0.01M F+-30	D201	5330573	DIODE 1S2473
C172	0209027	CERAMIC DISC (RESISTOR SHAPE) 0.015 MF+-3			

SCHEMATIC DIAGRAM (TUNER SECTION)



CIRCUIT BOARD DIAGRAM

Note

1. Voltage measured at base of chassis with minimum volume control and no signal.
2. Nomenclature of Resistors and Capacitors.

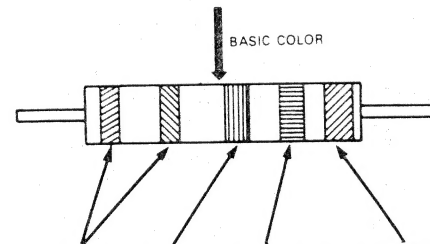
Circuit No.	
Value	No indicated Ω (Ohm) M : 1000 k Ω
Tolerance	No indicated $\pm 5\%$ K : $\pm 10\%$ M : $\pm 20\%$
Wattage	No indicated $\frac{1}{4}W$
Sort	No indicated Carbon film RC : Composition RW : Wire wound RS : Oxide metal film RN : Fixed metal film

Circuit No.	
Value	No indicated μF P : PF
Tolerance	No indicated $\pm 10\%$ J : $\pm 5\%$ M : $\pm 20\%$ Z : $\pm 80\%$, -20% D : $\pm 0.5pF$ C : $\pm 0.25pF$
Sort	Ceramic Electrolytic Mylar Polyester Styrol
Voltage	No indicated 50WV

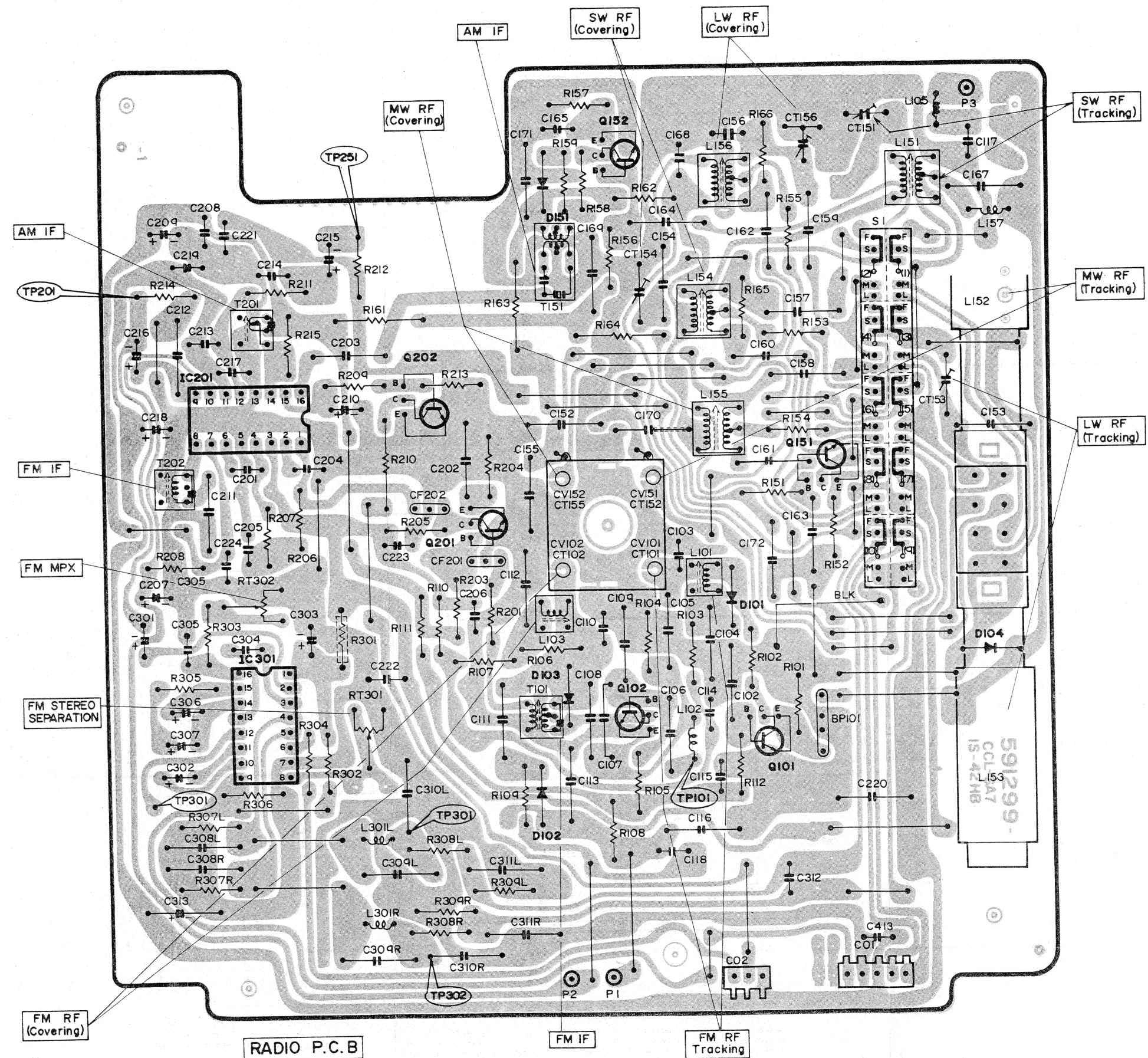
3. Be sure to make your orders of resistors and capacitors with value, voltage, tolerance and sort.
4. When replacing capacitors marked with *, use specified ones stated on parts list since required temperature characteristics.

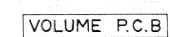
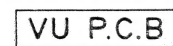
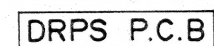
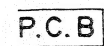
HOW TO READ CAPACITY OF RESISTOR SHAPE CAPACITORS

COLOR	RATED VOLTAGE
Pink	25V
Light green	50V

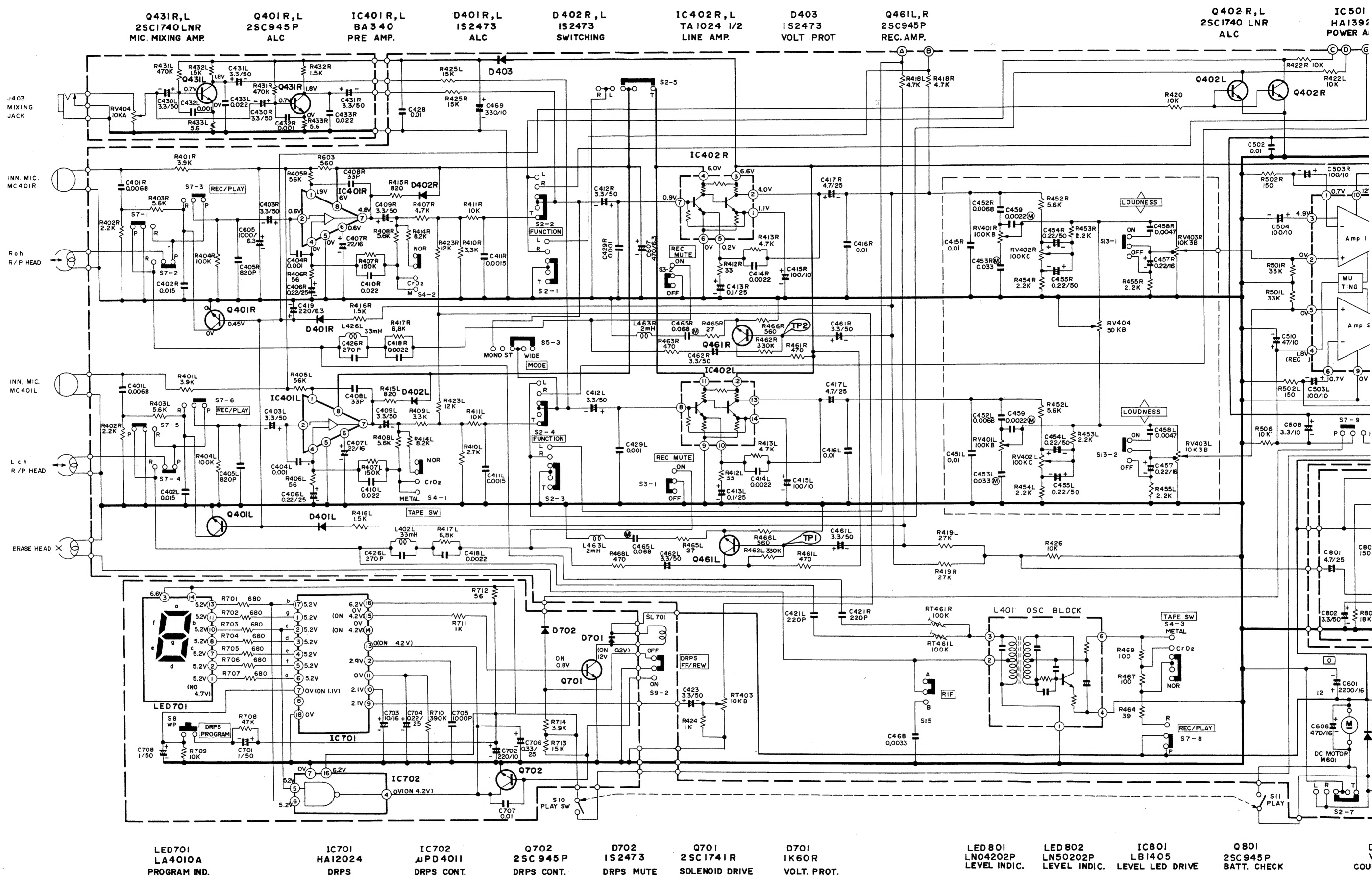


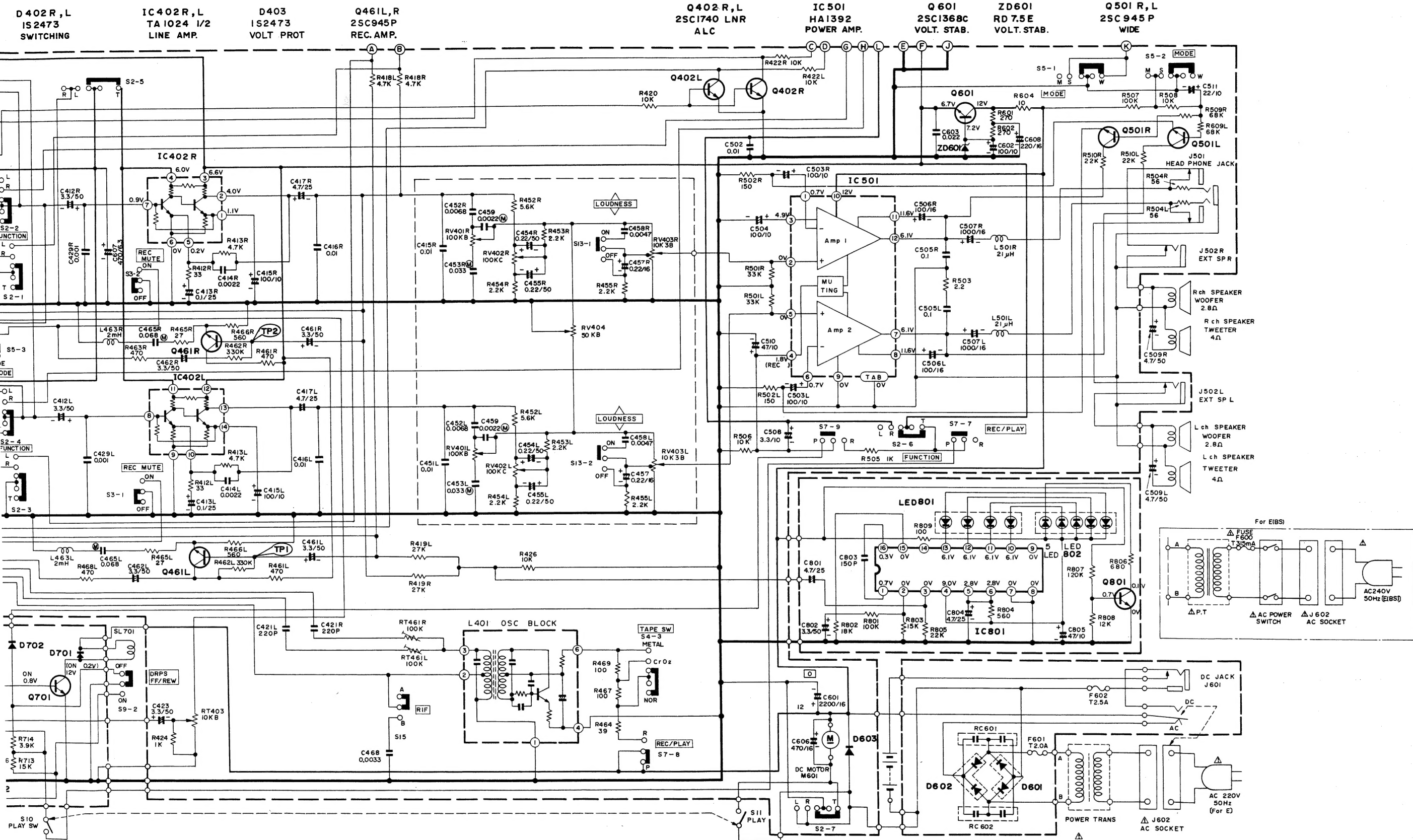
COLOR	CAPACITY	MULTIPLE	TOLERANCE	CHARACTERISTICS
Black	0	10^0	$\pm 20\%$	For temperature compensation
Brown	1	10^1		
Red	2	10^2		
Orange	3	10^3		
Yellow	4	10^4		
Green	5	10^5		
Blue	6			
Violet	7			
Grey	8		$\pm 30\%$	High dielectric constant type
White	9			For temperature compensation
Gold		10^{-1}	$\pm 5\%$	
Silver			$\pm 10\%$	High dielectric constant type





SCHEMATIC DIAGRAM(TAPE RECORDER/AF POWER SECTION)





D402R, L
IS2473
SWITCHING

IC402R, L
TA1024 1/2
LINE AMP.

D403
IS2473
VOLT. PROT.

Q461L, R
2SC945P
REC. AMP.

Q402R, L
2SC1740 LNR
ALC

IC501
HA1392
POWER AMP.

Q601
2SC1368C
VOLT. STAB.

ZD601
RD 7.5E
VOLT. STAB.

Q501R, L
2SC945P
WIDE

D702
IS2473
CONT.

D701
IS2473
DRPS MUTE

Q701
2SC1741R
SOLENOID DRIVE

D701
1K60R
VOLT. PROT.

LED801
LN04202P
LEVEL INDIC.

LED802
LN50202P
LEVEL INDIC.

IC801
LB1405
LEVEL LED DRIVE

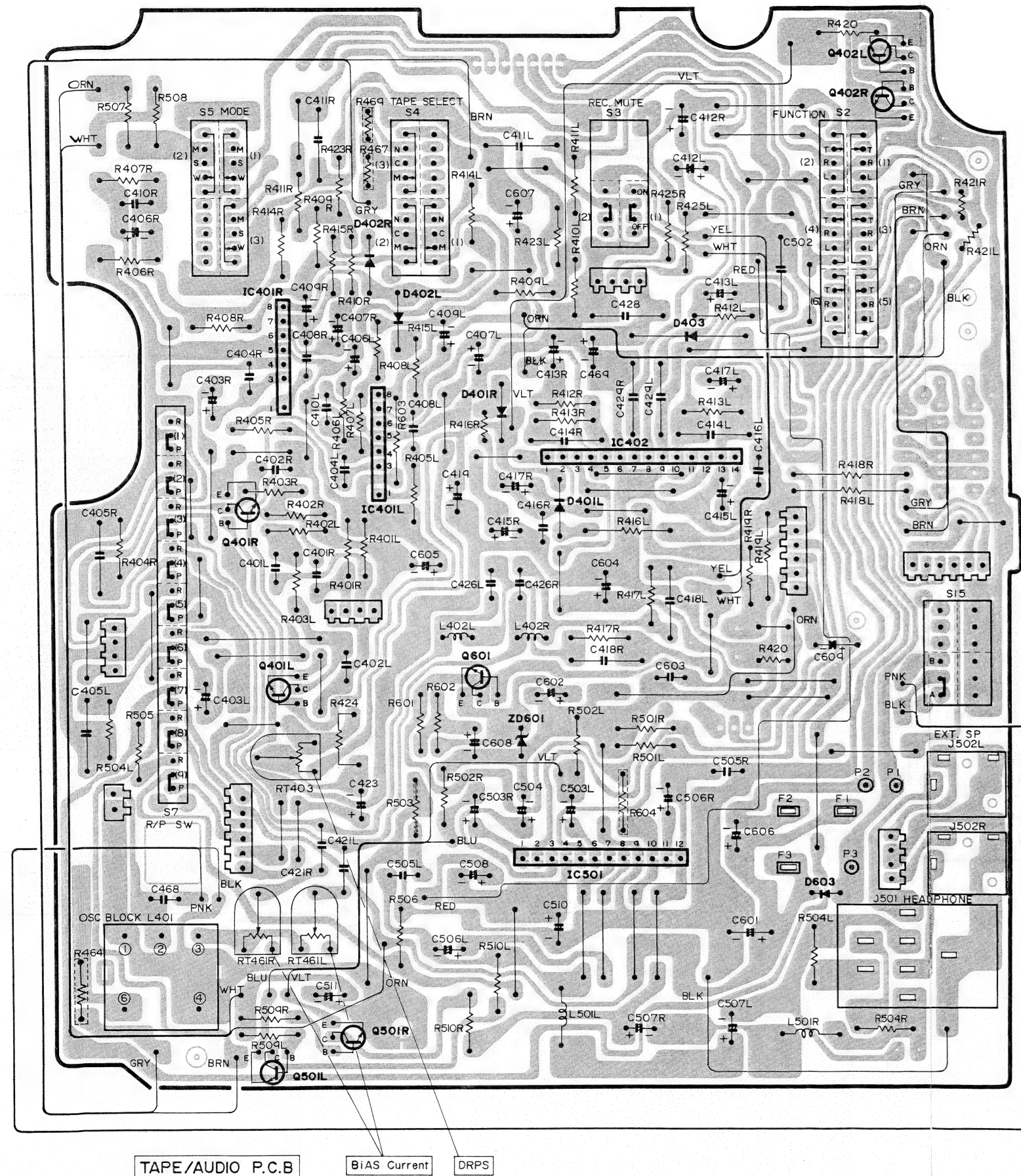
Q801
2SC945P
BATT. CHECK

D603
V03C
CURRENT PROT.

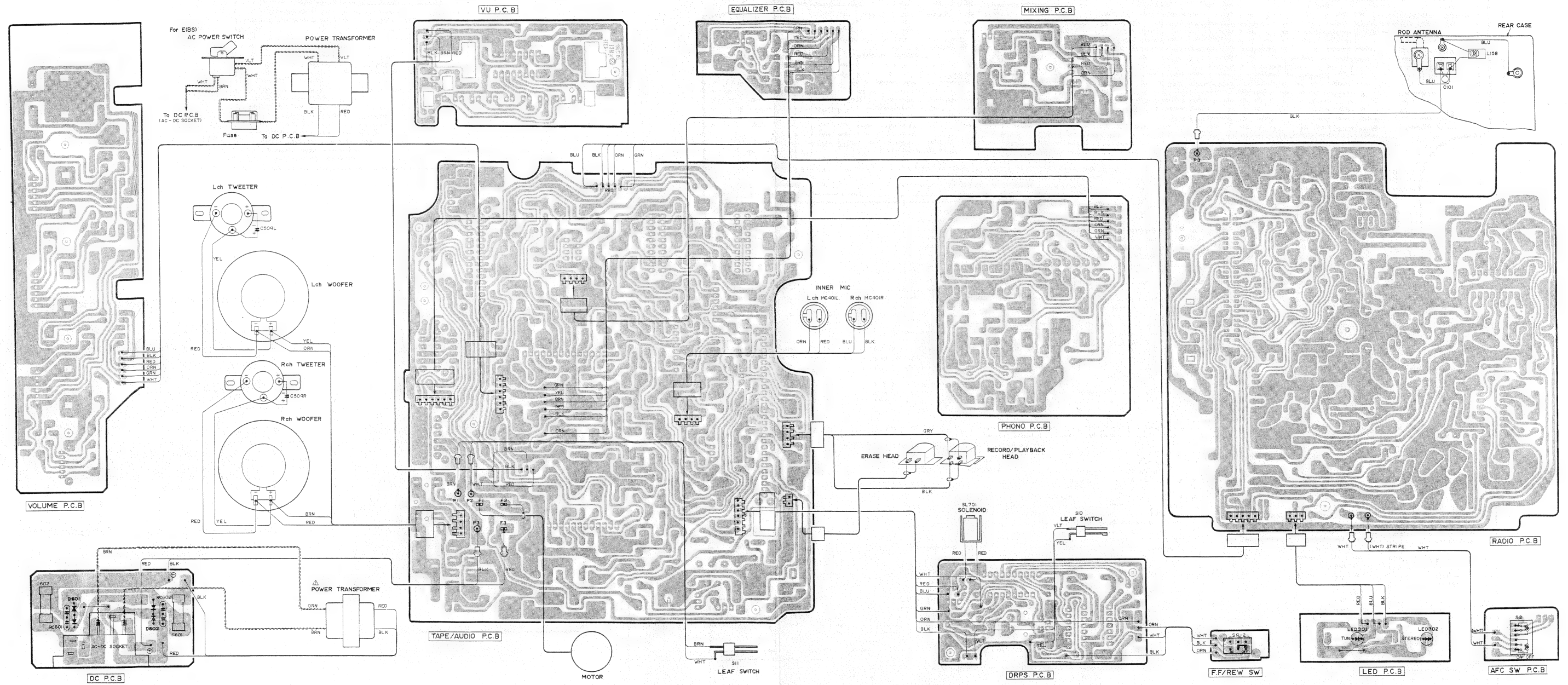
D602
SRP02-100NF
RECT.

D601
SRN02-100NF
RECT.

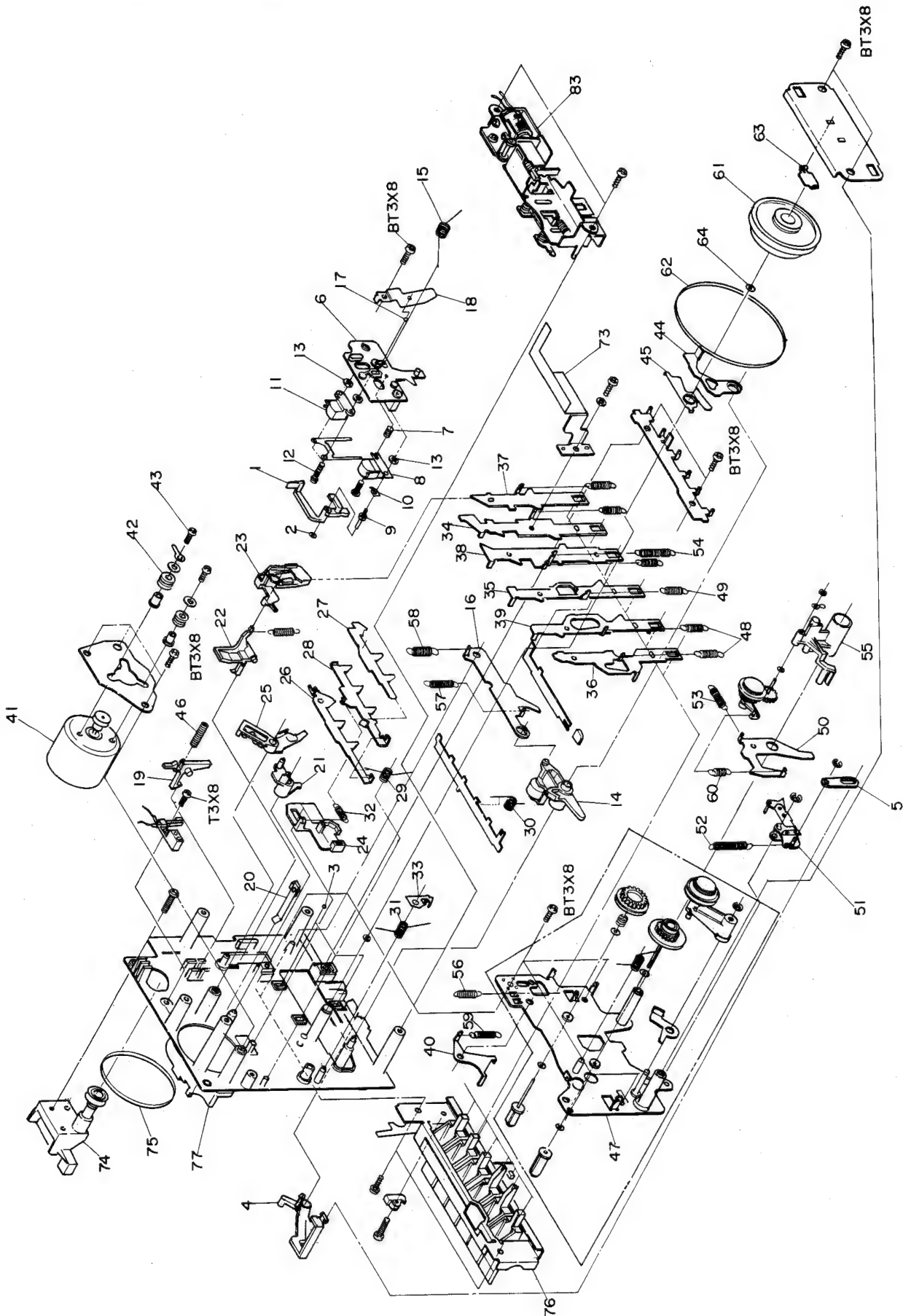
CIRCUIT BOARD DIAGRAM



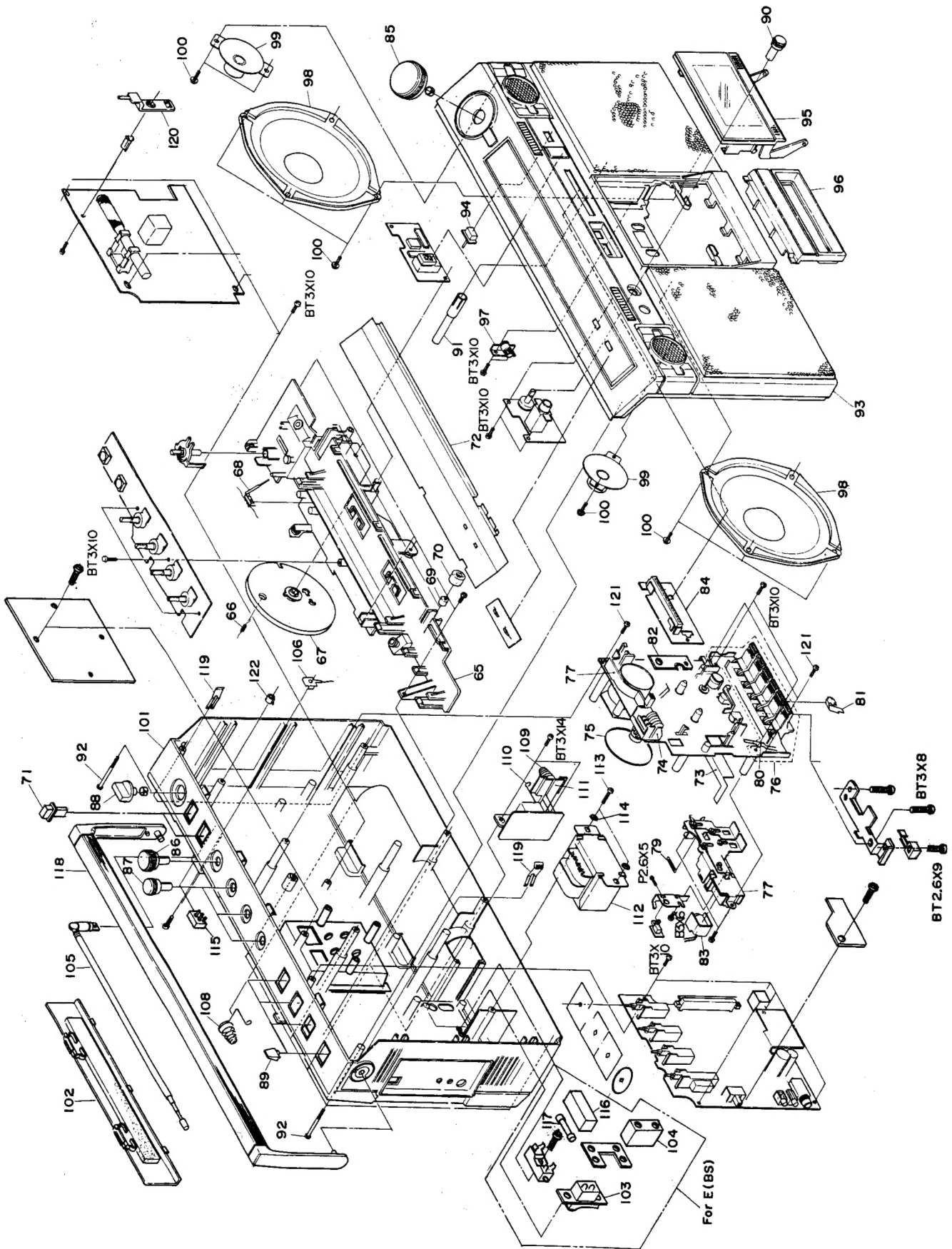
WIRING DIAGRAM



EXPLODED VIEW



Note: Components marked without numbers in this drawing are not specified as replacement parts.



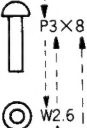








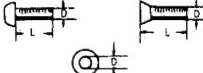
Note: Components marked without numbers in this drawing are not specified as replacement parts.

REPLACEMENT PARTS LIST

SYMBOL-NO	P-NO	DESCRIPTION	SYMBOL-NO	P-NO	DESCRIPTION
SEMI-CONDUCTORS			T151	5160101	CERAMIC FILTER 46.8KHZ
D401L, R	5330573	DIODE 1S2473	T201	5130122	AM IFT
D402L, R	5330573	DIODE 1S2473	T202	5140024	FM IFT TRANSFORMER
D403	5330573	DIODE 1S2473	COILS		
D601	5331452	DIODE SRN02-100NLF	L101	5126482	FM RF
D602	5331451	DIODE SRP02-100NLF	L102	5126391	FM
D603	5330001	RECTIFIER SILICON V03C 60H	L103	5126278	FM OSCILLATOR COIL
D702	5330573	DIODE 1S2473	L151	5123493	SWITCH ANTENNA
D701	5331051	DIODE 1K60	L152	5113503	FERRITE CORE ANTENNA
IC201	5351691	IC HA12413	L153	5113503	FERRITE CORE ANTENNA
IC301	5350684	IC HA1330	L154	5123494	SW OSC
IC401L, R	5350962	IC BA340	L155	5120319	OSCILLATOR COIL
IC402	5357001	IC TA1024	L156	5120465	LW OSC
IC501	5352141	IC HA1392	L157	5126391	FM
IC701	5352381	IC HA12024	L301LR	5150571	CHOKE COIL 33MH
IC702	5359501	IC MPD4011C	L401	5260821	OSCILLATOR BLOCK
IC801	5359581	IC LB1405	L402LR	5150571	CHOKE COIL 33MH
LED201	5380271	LED GL-9PR2	L463LR	5120273	TRAP COIL 2MH
LED301	5380271	LED GL-9PR2	L501LR	5150761	CHOKE COIL
LED302	5380271	LED GL-9PR2	MISCELLANEOUS		
LED352	5380271	LED GL-9PR2		5653321	IC SOCKET
LED701	5380521	LED LA4010A		5659121	BACK COVER
LED801	5380461	LED LN04202P	BP101	5161551	FILTER
LED802	5380462	LED LN05202P	CF201	5160211	CERAMIC FILTER CF107A
Q101	5321271	TRANSISTOR SILICON 2SC1674L 600MHZ	CF202	5160211	CERAMIC FILTER CF107A
Q102	5321281	TRANSISTOR SILICON 2SC1675-L 230MHZ 200M	△F601	5720177	FUSE 2A
Q151	5321281	TRANSISTOR SILICON 2SC1675-L 230MHZ 200M	△F602	5721064	FUSE 2.5A
Q152	5321281	TRANSISTOR SILICON 2SC1675-L 230MHZ 200M	J403	5674161	JACK-6.4MMD (MIXING JACK)
Q201	5321281	TRANSISTOR SILICON 2SC1675-L 230MHZ 200M	J501	5674242	HEADPHONE JACK
Q202	5321293	TRANSISTOR 2SC1740LN-R	J502LR	5673331	JACK-3.5MMD (EXT.SP JACK)
Q401L, R	5320813	TRANSISTOR 2SC945P	J601	5653241	DC SOCKET
Q402L, R	5321293	TRANSISTOR 2SC1740LN-R	△J602	5653241	AC SOCKET
Q431L, R	5321293	TRANSISTOR 2SC1740LN-R	J901	5676241	JACK (PHONO)
Q461L, R	5320813	TRANSISTOR 2SC945P	J902	5653211	DIN JACK
Q501L, R	5320813	TRANSISTOR 2SC945P	S 1	5625011	SLIDE SWITCH (BAND)
Q601	5320433	TRANSISTOR SILICON 2SC1061C 8M	S 2	5604491	LEVER SWITCH (FUNCTION)
Q701	5322213	TRANSISTOR 2SC1741R	S 2	5633621	PUSH SWITCH
Q702	5320813	TRANSISTOR 2SC945P	S 3	5604471	LEVER SWITCH (REC MUTE)
Q801	5320813	TRANSISTOR 2SC945P	S 4	5604481	LEVER SWITCH (TAPE SELECTOR)
Q901L, R	5321293	TRANSISTOR 2SC1740LN-R	S 5	5604481	LEVER SWITCH (MODE)
Q902L, R	5321293	TRANSISTOR 2SC1740LN-R	S 7	5623431	SLIDE SWITCH (REC/P.B)
ZD601	5330844	ZENER DIODE RD7.5EB	S 8	5633352	PUSH SWITCH (DRPS PROGRAM)
TRANSFORMERS			S 9	5633315	PUSH SWITCH (DRPS FF/REW)
T101	5140071	FM IFT	S 10	5603112	LEAF SWITCH (PLAY SW)
			S 11	5603231	LEAF SWITCH (PLAY SW)
			S 13	5633621	PUSH SWITCH (LOUDNESS)

SYMBOL-NO	P-NO	DESCRIPTION	SYMBOL-NO	P-NO	DESCRIPTION
MISCELLANEOUS			39	7297481	FAST FORWARD SLIDER (B)
S 14	5623871	SLIDE SWITCH (LINE/PHONO)	40	7286193	RECORDING LOCK LEVER
S 15	5623061	SLIDE SWITCH (RIF)	41	6420861	DC MOTOR ASSEMBLY
FOR ACCESSORIES			42	6576083	RUBBER PLATE
	5896391	FM ANTENNA (BS)	43	7539006	SPECIAL SCREW
△	5746341	CORD ASSEMBLY (BS)	44	7287819	RC LEVER
△	5747321	POWER CORD	45	7311142	FF FUNCTION LEVER
FOR CASSETTE DECK ASSEMBLY (A)			46	6304161	SPRING
1	6752792	PICK UP PIECE	47	7109498	TURNTABLE HOLDER ASSEMBLY
2	7786115	POLYESTER WASHER	48	6300375	SPRING FOR RECORDING PLATE
3	0948492	BALL - 2MMD	49	6324814	SPRING
4	6752801	PICK UP LEVER	50	7286031	FR LEVER
5	7311882	JOINT PLATE	51	7317881	SETTING OFF LEVER ASSEMBLY
6	6752491	HEAD PLATE	52	6302956	SPRING
7	6321734	SPRING	53	6301101	SPRING
8	5449031	RECORD PLAYBACK HEAD	54	6301233	SPRING
9	7545533	SPECIAL SCREW	55	7109603	FF, REWIND ARM ASSEMBLY
10	7781004	SCREW	56	6300981	SPRING
11	5445343	ERASE HEAD	57	6301361	SPRING
12	7780913	TAPPING SCREW-2MMDX10MM	58	6323064	SPRING
13	7778183	POLYESTER WASHER	59	6301721	SPRING
14	6383142	PRESSURE ROLLER ARM ASSEMBLY	60	6300996	SPRING
15	6307741	SPRING	61	6373281	FLYWHEEL ASSEMBLY
16	7286182	P.R. LEVER	62	6354211	BELT
17	0948492	BALL - 2MMD	63	6743884	THRUST SUPPORT
18	6329637	HEAD PLATE HOLDER	64	7786621	POLYSLIDER WASHER
19	6741103	RECORDING PREVENTION ARM	FOR CASSETTE DECK ASSEMBLY (B)		
20	6531813	CASSETTE HOLDER	65	6760694	CHASSIS ASSEMBLY
21	6756261	BRAKE FUNCTION ARM	66	6316231	SPRING M
22	6740982	EJECT ARM	67	6422241	PULLEY
23	6741186	EJECT SLIDER	68	6394511	POINTER
24	6756331	AUTO STOP FUNCTION PLATE	69	5421508	BUILT IN MICROPHONE
25	6741712	SWITCH FUNCTION ARM	70	6570221	MICROPHONE HOLDER
26	7287692	SW PLATE	71	6053213	PUSH BUTTON ASS. (LOUDNESS)
27	7297951	RC PLATE	72	6479545	SCALE PLATE (BS)
28	7288494	FUNCTION PLATE		6479546	SCALE PLATE (E)
29	6308102	SPRING	73	7328662	RECORD SPRING ASSEMBLY
30	6307733	SPRING	74	5559071	COUNTER (M2)
31	6307711	SPRING	75	6354471	COUNTER BELT
32	6300375	SPRING FOR RECORDING PLATE	76	6257981	FUNCTION BUTTON ASSEMBLY
33	7286241	PAUSE LOCK PIECE	77	6760671	P.W.B. HOLDER
34	7297851	RECORDING SLIDER (B)			
35	7297841	REWIND SLIDER (B)	79	6300378	SPRING
36	7286042	PAUSE SLIDER ASSEMBLY	80	6534031	EJECT SPRING
37	7297831	STOP SLIDER (B)	81	6532232	PSPRING
38	7297491	PLAY SLIDER (B)	82	7333311	HOLDER

SYMBOL-NO	P-NO	DESCRIPTION	SYMBOL-NO	P-NO	DESCRIPTION
MISCELLANEOUS			102	6173454	BATTERY LID ASSEMBLY
83	5643048	MAGNET	103	5602021	SEESAW SWITCH (BS)
84	6760651	LED HOLDER	104	6746902	SWITCH COVER (BS)
MISCELLANEOUS			105	5752461	ROD ANTENNA
85	6283383	TUNING KNOB ASSEMBLY	106	7450641	ANTENNA TERMINAL
86	6283521	KNOB (VOLUME)	107	8744414	BIND SCREW-3MMDX14MM
87	6283511	KNOB (BASS+TREBLE+BALANCE)	108	6308961	SPRING
88	6283393	KNOB ASS.(BAND)	109	6545651	BATTERY TERMINAL
89	6296851	LEVER KNOB	110	7328132	BATTERY TERMINAL
90	6283453	KNOB (MIXING)	111	6760661	TERMINAL HOLDER
91	6760621	STUD	112	5211736	POWER TRANSFORMER (BS)
92	7781148	BT SCREW-3MMDX50MM		5212181	POWER TRANSFORMER (E)
93	6035232	FRONT CASE ASSEMBLY	113	7781146	BT SCREW-3MMDX20MM
94	6052655	PUSH BUTTON (DRPS)	114	0681276	WASHER - 3MM
95	6092852	CASSETTE LID ASSEMBLY	115	5671661	FM ANTENNA TERMINAL
96	6221335	HEAD COVER	116	6746881	FUSE COVER (BS)
97	7328152	DAMPER ASSEMBLY	117	5720171	FUSE (BS)
98	5407423	SPEAKER-16CM	118	6334222	HANDLE ASSEMBLY
99	5401122	SPEAKER-5CM	119	6531142	SPRING
100	7781133	BT SCREW-3MMD	120	6760631	SLIDE LEVER
101	6035602	REAR CASE ASSEMBLY (BS)	121	8699412	BIND TAPPING SCREW-3MMDX12MM(BLACK)
	6035603	REAR CASE ASSEMBLY (E)	122	5687142	CAP TERMINAL

	Type of head					
	P	Pan head screw		BT	Binding head tapping screw	
	F	Flat countersunk head screw		BL	Bolt	
	B	Binding head screw		W	Washer	
	T	Round head tapping screw		E	"E" ring	
Length (L mm)						
Diameter (D mm)						

When ordering hardware excluding stated on these lists, be sure to make your orders with type and size.